

FIG. 1A (PRIOR ART)

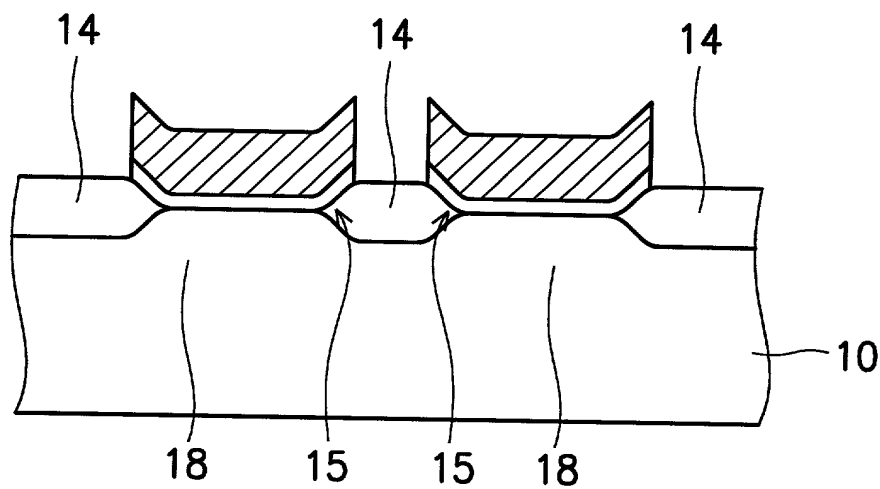


FIG. 1B (PRIOR ART)

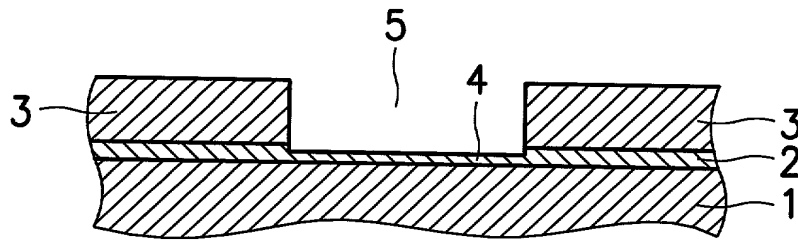


FIG. 2A (PRIOR ART)

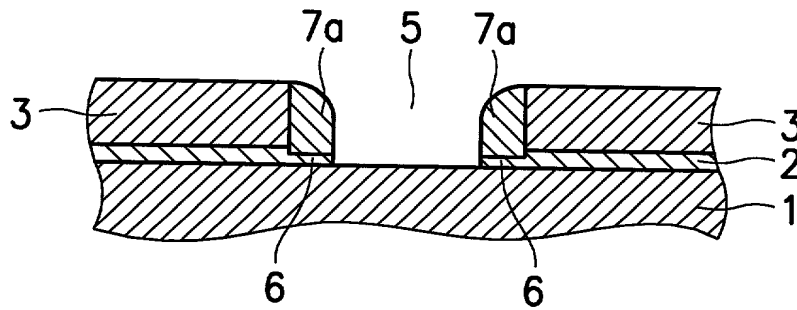


FIG. 2B (PRIOR ART)

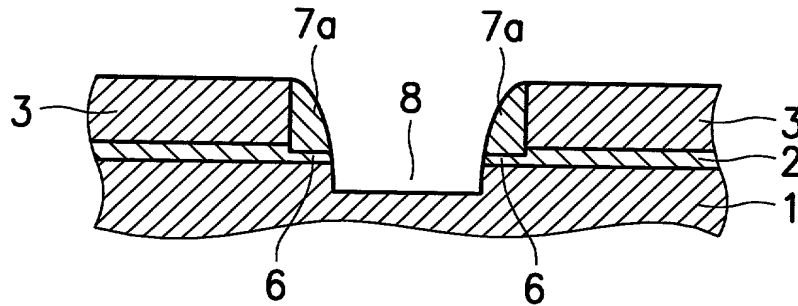


FIG. 2C (PRIOR ART)

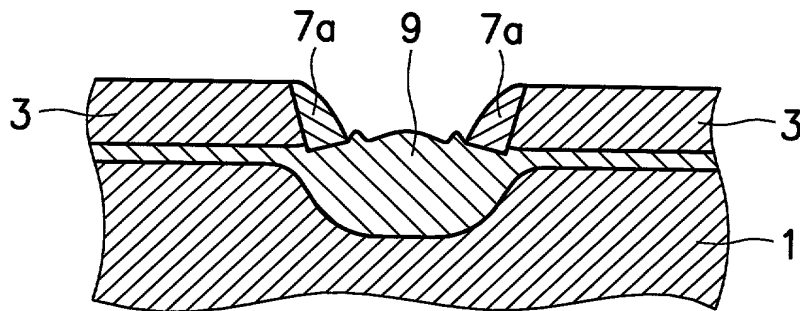


FIG. 2D (PRIOR ART)

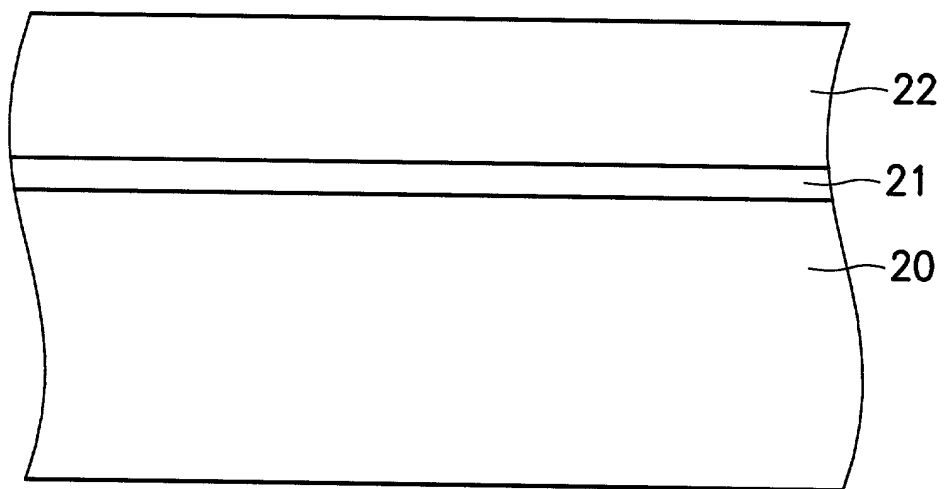


FIG. 3A

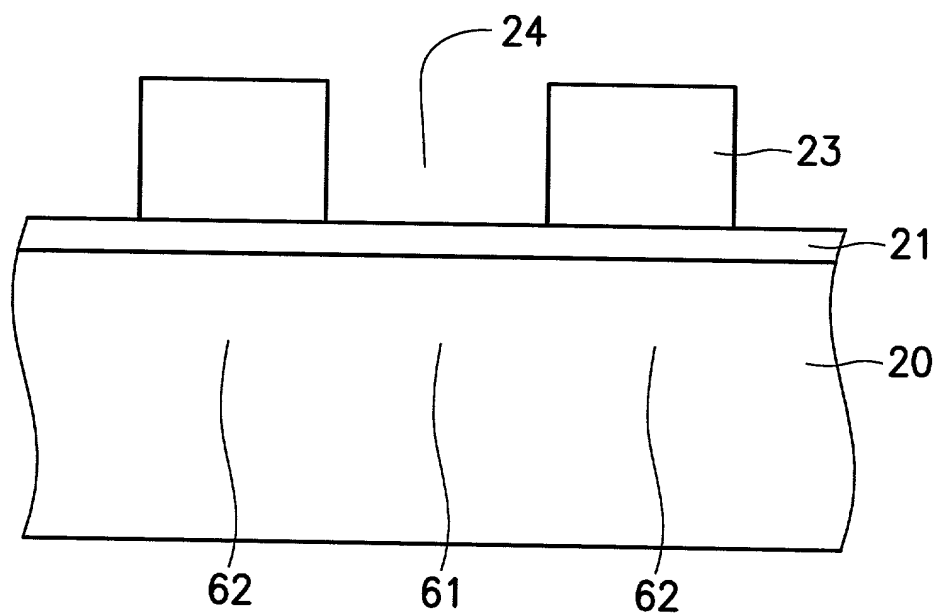


FIG. 3B

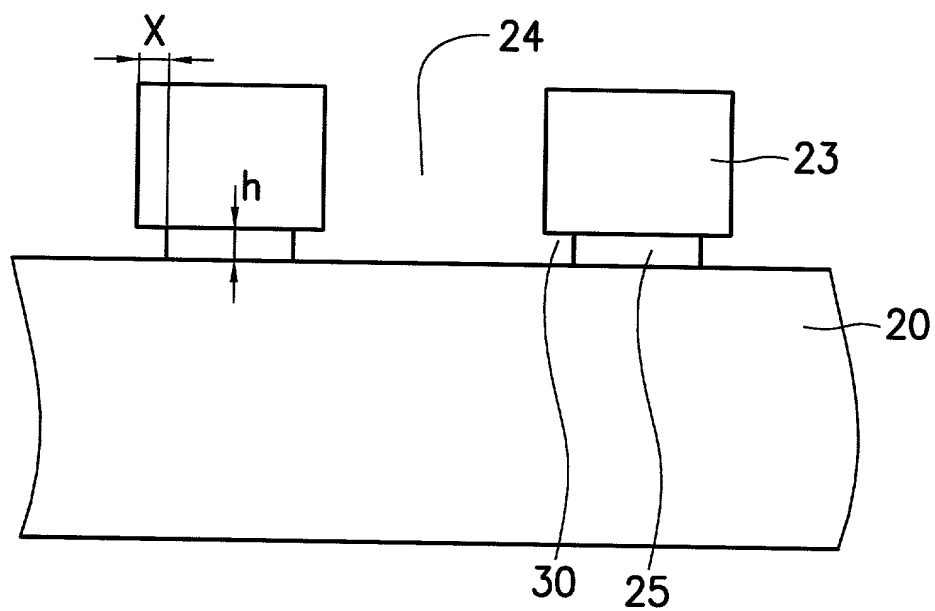


FIG. 3C

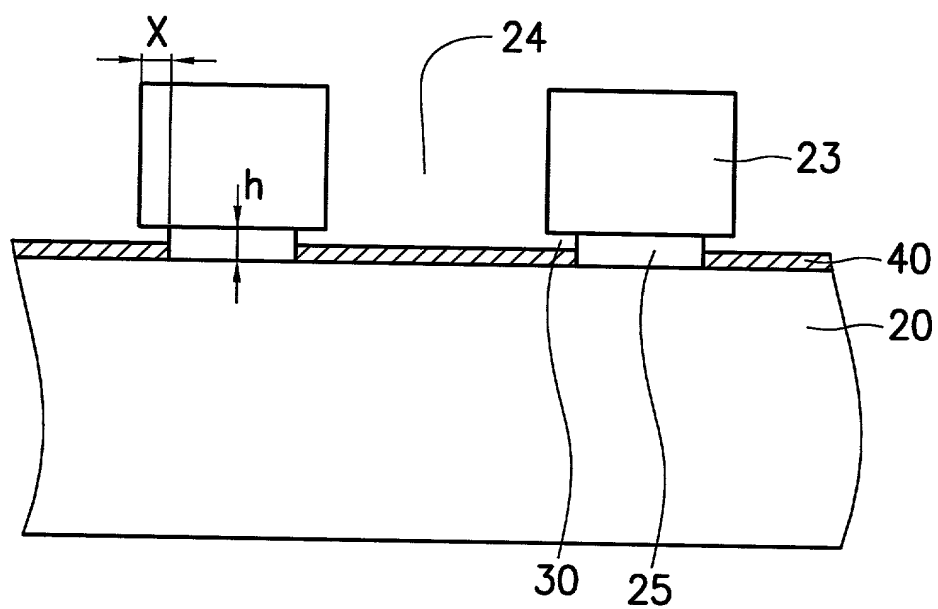


FIG. 3D

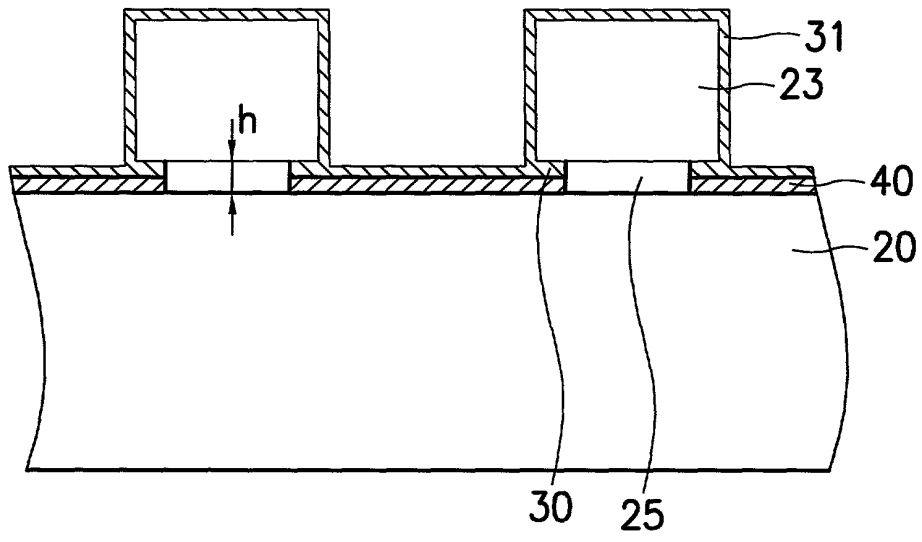


FIG. 3E

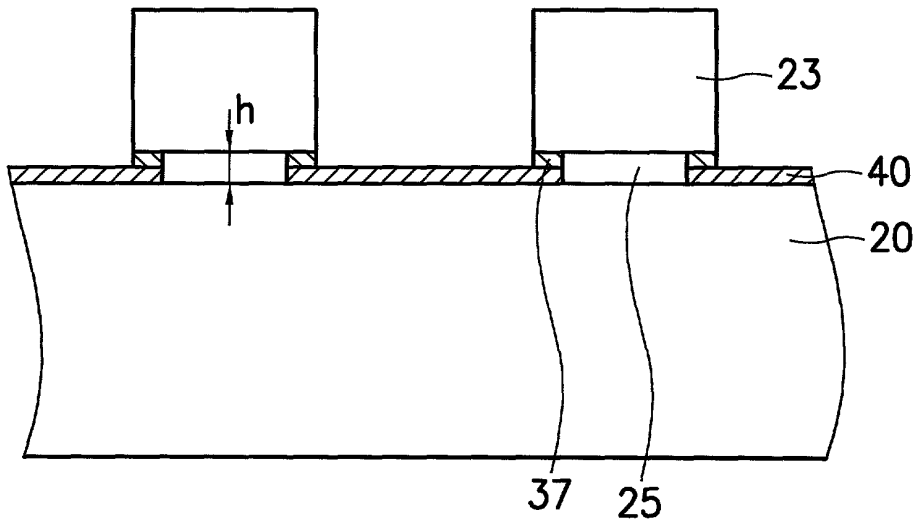


FIG. 3F

FIG. 3G

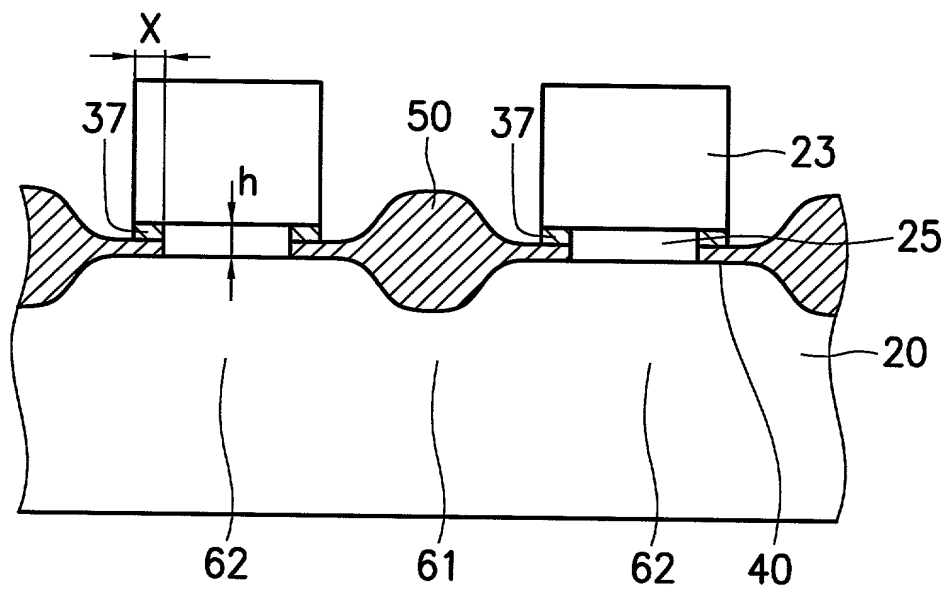


FIG. 3G

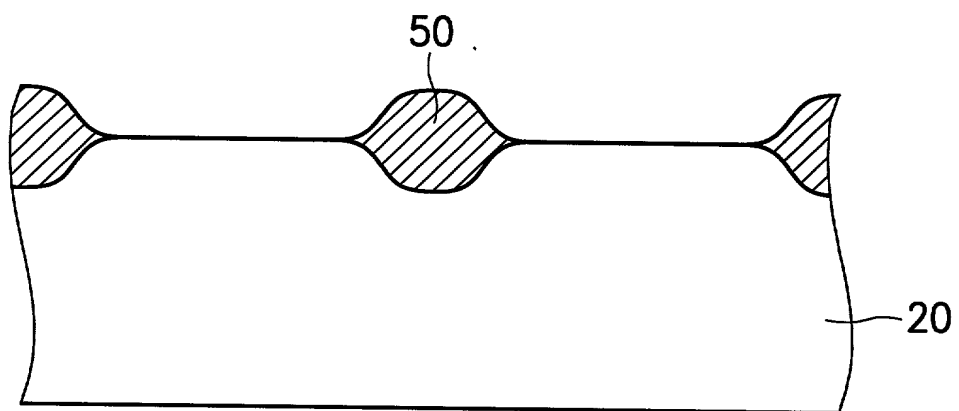


FIG. 3H

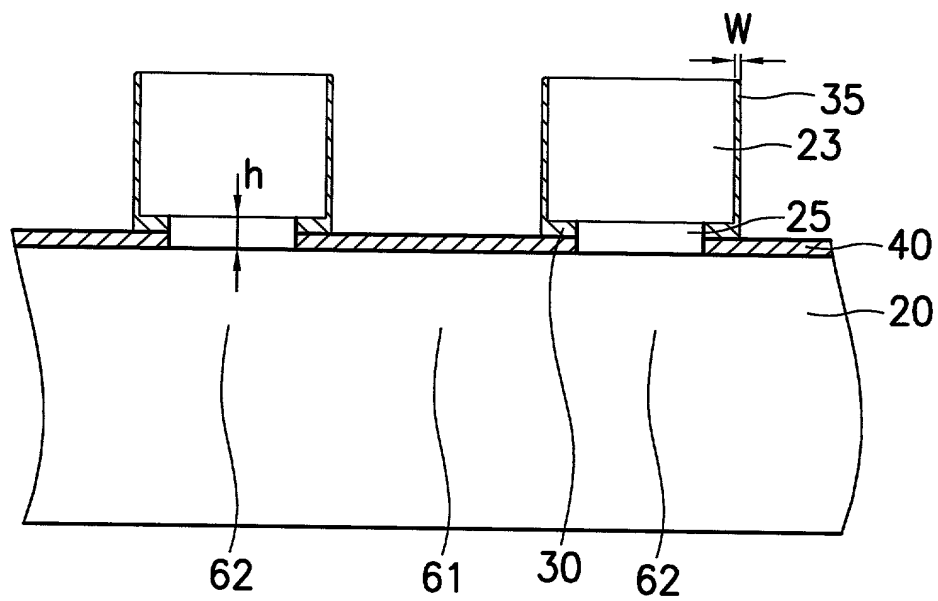


FIG. 4A

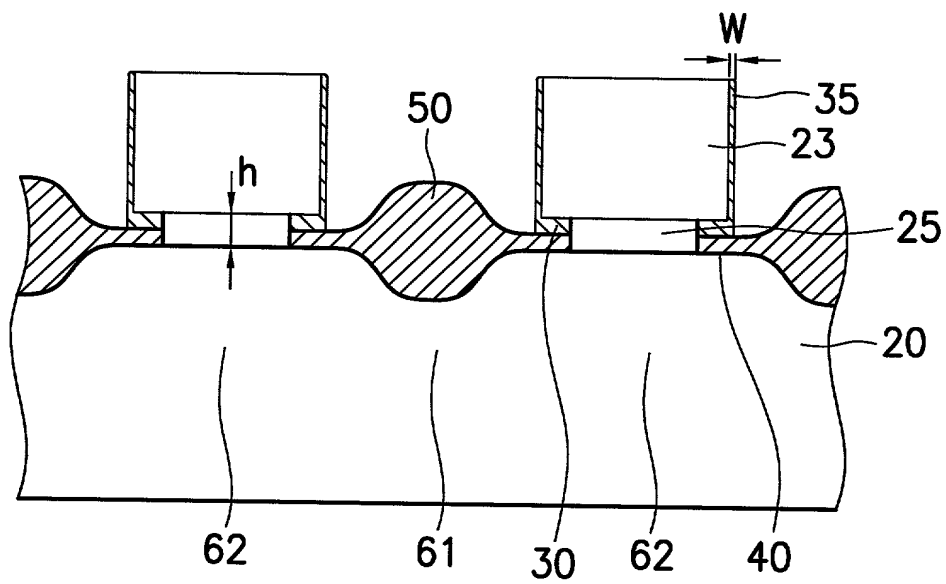
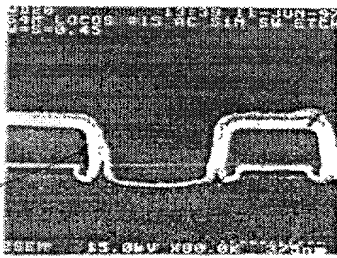


FIG. 4B

此為未長FOX之前的SEM照片,主要是看出liner 35的厚度及接

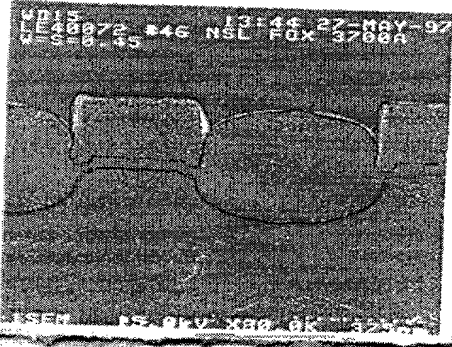
此為
liner



RECESSED LOCOS SCHEME
(BEFORE FIELD OXIDATION)

此為poly
poly over layer was used for SEM chemical strain treatment
証明所形成的sidewall (liner 35) 很薄.

fig 5A (process SEM cross-section)



由fig 5B可看出完全没有 bond's break encapsulation (BBE).
(做 0.3um 64M DRAM).

=> 此為長FOX之後的SEM圖.

fig 5B. (process SEM cross-section)

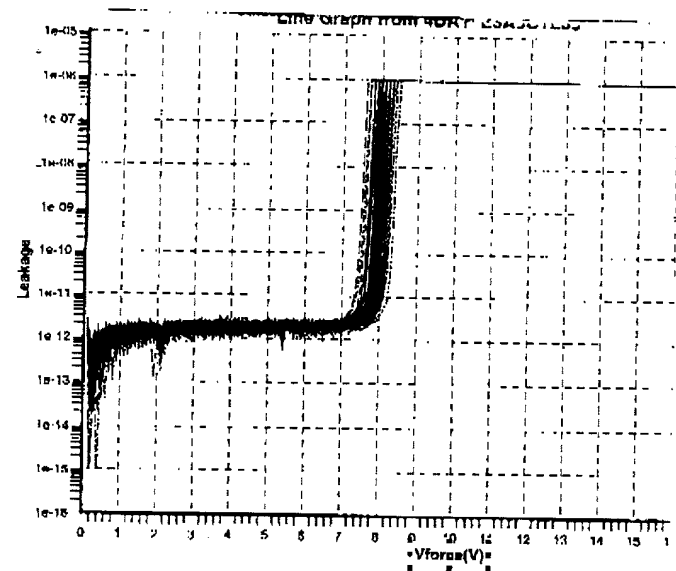


field oxide.

由fig 5C的立體照片,可看出最後長出來field oxide
的樣子,也証明沒有BBE,同時長出來field ox
也夠厚,沒有shrinking effect.

fig 5C. active area.
(process SEM cross-section)

=> 和fig 5B相同,只是拍攝成立體圖.



從fig 5D可看出

well junction measurement results
show that no silicon defect was induced by
isolation process.

⇒ 電信測量圖 (做完 isolation process 之後測的)。

fig 5D. (electrical monitoring)



習知沒有長 2nd pad oxide (40) 時 substrate
遇到較高 stress 被 ~~破壞~~ 破壞。TEH 是

TEH shows severe silicon defect induced
by high stress.

→ defect.

→ substrate.

fig 5E.